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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Re: Our file: 7557/21 Examiner:
Applicant: Dimitris N. Metaxas and Anant Madabhushi Art Unit:
Serial No.: 10/736,455
Filing Date: 12/15/03
Title: Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images

Sir:

Enclosed for filing in the United States Patent and Trademark Office is the following:

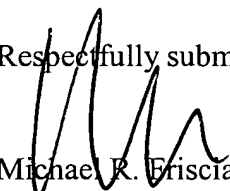
1. Transmittal of Information Disclosure Statement
2. Form PTO-1449
3. Copies of References from Form PTO-1449
4. Transmittal Sheet
5. Postcard Receipt

CONDITIONAL PETITION

If any extension of time is required for the submission of the above-identified items, Applicant requests that this be considered a petition therefore. Please charge any additional charges or any other charges relating to this matter to the deposit account of the writer, **Account No. 06-2143**. A duplicate copy of this letter is enclosed.

12/30/04
Date

Respectfully submitted,


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enc.

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By: 
Janelle Fava

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**(Under 37 CFR 1.97(b) or 1.97(c))**

Docket No.

7557/21

In Re Application Of: **Dimitris N. Metaxes and Anant Madabhushi**

Application No.

10/736,455

Filing Date

12/15/03

Examiner

Customer No.

20694

Group Art Unit

3762

Confirmation No.

3096

Title: **Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images**

Address to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

37 CFR 1.97(b)

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

37 CFR 1.97(c)

2. ☐ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

- ☐ the statement specified in 37 CFR 1.97(e);

OR

- ☐ the fee set forth in 37 CFR 1.17(p).

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.

7557/21

In Re Application: **Dimitris N. Metaxas and Anant Madabhushi**

JAN 03 2005

Application No.

10/736,455

Filing Date

12/15/03

Examiner

Customer No.

20694

Group Art Unit

3762

Confirmation No.

3096

Title: **Method and Apparatus for Automatically Detecting Breast Lesions and Tumors in Images****Payment of Fee**

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

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Dated: 12/30/04

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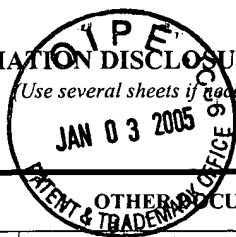
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INFORMATION DISCLOSURE CITATION

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| | |
|---|---|
| Docket Number (Optional) 7557/21 | Application Number 10/736,455 |
| Applicant(s) Dimitris N. Metaxas and Anant Madabhushi | |
| Filing Date 12/15/03 | Group Art Unit 3762 |

| *EXAMINER INITIAL | OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) |
|----------------------|--|
| 1 | Arger, et al., "Interreader Variability and Predictive Value of US Descriptions of Solid Breast Masses," Academic Radiology, Vol. 8, No. 4, April 2001, pp. 335-342. |
| 2 | Boukerroui, et al., "Segmentation of Ultrasound Images - Multiresolution 2D and 3D Algorithm Based on Global and Local Statistics," Pattern Recognition Letters 24 (2003), pp. 779-790. |
| 3 | Chou, et al., "Stepwise Logistic Regression Analysis of Tumor Contour Features for Breast Ultrasound Diagnosis," Ultrasound in Med. & Biol., 2001, Vol. 27, No. 11, pp. 1493-1498. |
| 4 | Christopher, et al., "3-D Bayesian Ultra-sound Breast Image Segmentation Using the EM/MPM Algorithm," IEEE International Symposium on Biomedical Imaging, 2002, pp. 601-604. |
| 5 | Collaris, et al., "Automatic Detection of Closed Tumor Contours in Medical Ultrasound Images on the Basis of Level-Dependant Spatial Summation," Proceedings of the 18th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 1997, Vol. 2, pp. 907-908. |
| 6 | Drukker et al., "Computerized Detection and Classification of Cancer on Breast Ultrasound," Academic Radiology, Vol. 11, No. 5, May 2004, pp. 526-535. |
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| 9 | Herlin, et al., "Stochastic Segmentation of Ultrasound Images," Proceedings of the 11th IAPR International Conference on Pattern Recognition, 1992, pp. 289-292. |
| 10 | Horsch, et al., "Automatic Segmentation of Breast Lesions on Ultrasound," Medical Physics, 2001, Vol. 28(8), pp. 1652-1659. |
| 11 | Horsch, et al., "Performance of Computer-Aided Diagnosis in the Interpretation of Lesions on Breast Sonography," Academic Radiology, Vol. 11, No. 3, March 2004, pp. 272-280. |
| 12 | Muzzolini, et al., "Multiresolution Texture Segmentation With Application to Diagnostic Ultrasound Images," IEEE Transactions on Medical Imaging, Vol. 12, No. 1, 1993, pp. 108-123. |
| EXAMINER | DATE CONSIDERED |

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INFORMATION DISCLOSURE CITATION

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JAN 03 2005

Docket Number (Optional)

7557/21

Application Number

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Applicant(s)

Dimitris N. Metaxas and Anant Madabhushi

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Group Art Unit

3762

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INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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Ogawa, et al., "Three Dimensional Ultrasonic Imaging for Diagnosis of Breast Tumor," IEEE Ultrasonics Symposium, 1998, Vol. 2, pp. 1677-1680.

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Ruggiero, et al., "Automatic Recognition of Malignant Lesions in Ultrasound Images by Artificial Neural Networks," Proceedings of 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 1998, Vol. 20, No. 2, pp. 872-875.

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Yoshida, et al., "Segmentation of Liver Tumors in Ultrasound Images Based on Scale-Space Analysis of the Continuous Wavelet Transform," IEEE Ultrasonics Symposium, 1998, Vol. 2, pp. 1713-1716.

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